ACCESSION NR: AP4011720

where $k_1 \ldots\ldots k_n$ - arbitrary complex numbers. A detailed solution is given for $n = 3$ both in a repulsing and an attracting field. The ψ-functions of the scattering theory are found, satisfying the Lippmann-Schwinger equations, and their completeness (both in coordinate and momentum space) is proved. The scattering operator is constructed in terms of the ψ-functions

$$S(b|a) = \int d^3x\, \overline{\psi_{out}(x|b)}\, \psi_{in}(x|a).$$

and its eigenfunctions and eigenvalues, in particular for symmetric function subspace with elastic scattering, are found. "The authors express their gratitude to the members of the I. Ye. Tamm seminar in FIAN in October 1962." Orig. art. has: 29 equations.

ASSOCIATION: Moskovskiy universitet, Kafedra teorii funktsiy i funktsional'nogo analiza (Moscow University, Department of Theory of Functions and Functional Analysis)

SUBMITTED: 07Feb63 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: PH NO REF SOV: 003 OTHER: 003

ACCESSION NR: AP4011720 S/0055/64/000/001/0021/0028

AUTHORS: Berezin, F. A.; Pokhil, G. P.; Finkel'berg, V. M.

TITLE: Schrödinger equation for system of one-dimensional particles with point interaction

SOURCE: Moscow. Universitet. Vestnik. Seriya 1. Matematika, mekhanika, no. 1, 1964, 21-28

TOPIC TAGS: Schrödinger equation, point interaction, delta function, wave function, scattering theory, elastic theory

ABSTRACT: The Schrödinger equation for n one-dimensional particles of equal mass and point interaction field is given

$$\left[-\sum_{\mu=1}^{n}\frac{\partial^2}{\partial x_\mu^2}-2\lambda\sum_{\mu<\nu}\delta(x_\mu-x_\nu)\right]\psi(x_1\ldots x_n)=E\psi(x_1\ldots x_n),$$

where $x_1,\ldots,x_n$ -particle coordinate, 2λ -interaction constant, and $\delta(x)$ - Dirac delta function. An explicit solution is obtained for the wave function ψ in the form

$$\psi=\exp(ik_1x_{a_1}+\ldots+ik_nx_{a_n}),$$

Card 1/2

BEREZIN, F.A.

Operators in the representation of second quantization. Dokl. AN SSSR 154 no.5:1063-1065 F'64. (MIRA 17:2)

1. Predstavleno akademikom I.G. Petrovskim.

L 12670-63 EWT(d)/T/EWP(w)/BDS AFFTC IJP(c)

ACCESSION NR: AP3002865 S/0020/63/150/005/0959/0962

AUTHOR: Berezin, F. A.

TITLE: Canonical transformations in the representation of secondary quantizations

SOURCE: AN SSSR. Doklady*, v. 150, no. 5, 1963, 959-962

TOPIC TAGS: canonical transformation, secondary quantization, quantization, operator

ABSTRACT: Several results are given on the ring of operators that bear out all canonical transformations. Orig. art. has: 9 formulas.

ASSOCIATION: none

SUBMITTED: 10Jan63 DATE ACQ: 15Jul63 ENCL: 00

SUB CODE: MM NO REF SOV: 002 OTHER: 002

Card 1/1

L 12463-63
Lee's theory...

B/039/63/060/004/002/004

characteristic function and operator or dispersion in a specified sector; and 5, expansion of symmetric operators in ranges with an indefinite scalar product. Lee's theory properly imitates some existing patterns of relativity of invariant field theories. The calculations with introduction in this work of indefinite metrics are equivalent with the general theory of renormalisation. There are 13 references, the most important of which is T.D. Lee, Some Special Examples of Renormalisable Field Theory, Phys. Rev., v. 95, no. 5, 1954, 1329-1334.

SUBMITTED: November 27, 1961

Card 2/2

L 12463-63 EWT(1) BDS AFFTC/ASD IJP(C)

S/039/63/060/004/002/004

51

AUTHOR: Berezin, F. A., (Moscow)

TITLE: Lee's theory

PERIODICAL: Matematicheskiy sbornik, novaya seriya, v. 60(102), no. 4, 1963, 425-446

TEXT: Since it is generally accepted that construction of the quantum field theory in the framework of the theory of operators in the Gilbert range is not possible, the phenomena for this impossibility are presented and the mathematical principles of all these phenomena for the model theory proposed by Lee are investigated in this article. Included are: 1. the necessity for introduction of indefinite metrics; 2. the change of rules of commutation associated with indefinite metrics; 3. the construction of Hamiltonian operators in specified sectors; the characteristic function of the Hamiltonian operator in a specified sector; 4. the

Card 1/2

On the Lee model ...

this two-dimensional theory a successive calculation by means of H_r is completely equivalent to the renormalization theory. If the Hilbert space of occupation numbers is extended by introducing an indefinite metric, a nontrivial operator H_r can be constructed for a three-dimensional Lee model. The calculation by means of this operator is equivalent to the theory of renormalization. The non-physical poles are explained by the general properties of operators in Hilbert spaces with indefinite scalar products.

PRESENTED: November 16, 1961, by I. G. Petrovskiy, Academician

SUBMITTED: November 14, 1961

Card 2/2

16,4600

S/020/62/143/004/008/027
B104/B102

AUTHOR: Berezin, F. A.

TITLE: On the Lee model

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 4, 1962, 811 - 814

TEXT: The formulation of a Lee model within the frame of the Hamilton formalism is considered. The Hamiltonian $H_o + gV$ is no operator in a Hilbert space. The present paper gives a method to connect a regular operator H_r with this Hamiltonian. H_r is a self-adjoint operator and coincides with H_o in all elements f of the occupation-number space, which satisfy the condition $Vf = 0$. H_r is the self-adjoint extension of the symmetric operator H_o. $\tilde{H}_o$ is the operator H_o on the set of the f elements. In the Lee model it is shown that $H_r = H_o$. This is a zero-charge paradoxon and excludes the formulation of a theory within the framework of the Hamilton formalism. In a two-dimensional Lee model there exists a nontrivial H_r operator. In

Card 1/2

21959

S/020/61/137/005/002/026
C111/C222

A remark on the Schrödinger equation...

The region of definition of H_α consists of functions satisfying the condition

$$\int \frac{\sin N|x|}{|x|} f(x)d^3x = c(1-4\pi\varepsilon N)+o(1), \quad \int |H_\alpha f|^2 d^3x < \infty . \qquad (12')$$

It is stated that the mathematical content of the investigation of the equation (1) by physicists (e.g. Ref.1) consists in replacing (2) by the operator (12),(12') being an extension of the operator $-\Delta$ the region of definition of which consists of those $f(x)$ for which $f(0)=0$.

There are 2 Soviet-bloc references.

PRESENTED: November 25, 1960, by I.G.Petrovskiy, Academician

SUBMITTED: November 24, 1960

Card 5/5

21959
S/020/61/137/005/002/026
C111/C222

A remark on the Schrödinger equation...

Let D_L be the set of functions for which

$$\int p^4 |\psi|^2 d^3p < \infty, \quad \int \psi d^3p = 0.$$

Let L be the operator of the multiplication with p^2 defined in D_L. L is a closed symmetrical operator with the defect index (1,1). All extensions of L are given by

$$H_\alpha \psi = p^2 \psi + \lim_{N \to \infty} \frac{\alpha}{1-4\pi\alpha N} \int \chi_N(p) \psi(p) d^3p, \qquad (9)$$

where $\psi(p)$ has the properties

$$\int \chi_N(p) \psi(p) d^3p = c(1-4\pi\alpha N)+o(1), \quad \int |H_\alpha \psi|^2 d^3p < \infty \,|. \qquad (9')$$

It is stated that the eigenfunctions of the continuous spectrum H_α are given by (7). Using these results then the scattering operator and the results given in (Ref.1: Ya.B.Zel'dovich, Zh E T F 38, no.3, 819(1960)) can be obtained.

In the x-representation it holds

$$H_\alpha f = -\Delta f + \alpha \lim_{N \to \infty} \frac{1}{1-4\pi\alpha N} \frac{\sin N|x|}{|x|} \int \frac{\sin N|y|}{|y|} f(y) d^3y. \qquad (12)$$

Card 4/5

A remark on the Schrödinger equation...

$$\tilde{\psi}_N^+(p, s) = \delta(p-s) - \frac{\varepsilon'(N)}{1+\varepsilon'(N)\int \frac{\chi_N^2(p)\,d^3p}{p^2-s^2-i0}} \frac{\chi_N(p)\,\chi_N(s)}{p^2-s^2-i0}. \qquad (5)$$

$$s^2 = E, \quad \varepsilon' = \frac{\varepsilon(N)}{8\pi^3}.$$

Furthermore:

$$\int \frac{\chi_N^2(p)\,d^3p}{p^2-s^2-i0} = 4\pi\int_0^N \frac{p^2dp}{p^2-s^2-i0} = 4\pi\left(N + \frac{|s|}{2}\left(-\pi i + \ln\frac{N-|s|}{N+|s|}\right)\right). \qquad (6)$$

Choosing $\varepsilon'(N) = \frac{\alpha}{1-2\pi\alpha N}$, α = const, then the limit value of $\tilde{\psi}^+_N$ for $N\to\infty$ equals

$$\tilde{\psi}^+ = \delta(p-s) - \frac{\alpha}{1-2\pi^2 i\alpha|s|}\,\frac{1}{p^2-s^2-i0}. \qquad (7)$$

At the other hand, the authors consider the Fourier transform of (2)

$$\tilde{H}\psi = p^2\psi + \varepsilon'\int \psi\, d^3p. \qquad (8)$$

Card 3/5

3/020/61/137/005/002/026
C111/C222

A remark on the Schrödinger equation...

$$p^2\tilde{\psi} + \frac{(N)}{8\pi^3}\int \tilde{u}_N(p,q)\tilde{\psi}(q)d^3q = E\tilde{\psi};$$

$$\tilde{u}_N(p,q) = \int e^{i(qy-px)}u_N(x,y)d^3xd^3y, \qquad (\tilde{N})$$

where $$\lim_{N\to\infty} \tilde{u}_N(p,q) = 1. \qquad (3')$$

Now u_N is chosen so that

$$\tilde{u}_N(p,q) = \chi_N(p)\,\chi_N(q); \qquad \chi_N(p) = \begin{cases} 1 \text{ for } p^2 < N^2, \\ 0 \text{ for } p^2 > N^2. \end{cases} \qquad (4)$$

Then the eigenfunctions belonging to the continuous spectrum read

21959
S/020/61/137/005/002/026
C111/C222

24.4500

AUTHORS: Berezin, F.A., and Faddeyev, L.D.

TITLE: A remark on the Schrödinger equation with a singular potential

PERIODICAL: Akademiya nauk SSSR. Doklady, vol.137,no.5,1961, 1011-1014

TEXT: The solution of the equation

$$-\Delta\psi + \varepsilon\delta(x)\psi = E\psi, \qquad (1)$$

where $\delta(x)$ is the Dirac δ-function, contains certain difficulties since

$$H = -\Delta + \varepsilon\delta(x) \qquad (2)$$

is no operator in the Hilbert space.
Instead of (1) the authors consider

$$-\Delta\psi + \varepsilon(N)\int u_N(x,y)\psi(y)d^3y = E\psi, \qquad (N)$$

where u_N has the property

$$\lim_{N\to\infty} u_N(x,y) = \delta(x)\,\delta(y). \qquad (3)$$

For the solution of (N) the authors use the Fourier transformation and obtain

Card 1/5

BEREZIN, F.A.; FADDEYEV, L.D.

Remark on Schrödinger's equation with a singular potential. Dokl. AN SSSR 137 no.5:1011-1014 Ap '61. (MIRA 14:4)

1. Predstavleno akademikom I.G.Petrovskim.
(Differential equations, Partial) (Quantum theory)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000204800016-6

BEREZIN, F.A.

Canonical transformation of operators in the representation of the secondary quantization. Dokl. AN SSSR 137 no.2:311-314 Mr '61. (MIRA 14:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Predstavleno akademikom I.G.Petrovskim.
(Mathematical physics)

BEREZIN, F.A.

Thirring's model. Zhur.eksp.i teor.fiz. 40 no.3:885-894 Mr '61.
(MIRA 14:8)

1. Moskovskiy gosudarstvennyy universitet.
(Quantum theory)

RABINOVICH, V.L. (Petropavlovsk-Kazakhstanskiy); KONSTANTINOV, N.N. (Moskva); VARPAKHOVSKIY, F.L. (Moskva); BESKINA, L.N. (Moskva); BEREZIN, F.A. (Moskva); GUTNIK, L.A. (Moskva)

Solutions of problems. Mat. pros. no.6:337-353 '61. (MIRA 15:3)
(Mathematics--Problems, exercises, etc.)

An Analogue to the Liouville Theorem for Symmetric Spaces With Negative Curvature

SOV/20-125-6-2/61

There are 5 references, 4 of which are Soviet, and 1 American.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova (Moscow State University imeni M.V. Lomonosov)

PRESENTED: January 9,1959, by P.S. Aleksandrov, Academician

SUBMITTED: December 31, 1958

16(1)

AUTHOR: Berezin, F.A.

SOV/20-125-6-2/61

TITLE: An Analogue to the Liouville Theorem for Symmetric Spaces With Negative Curvature (Analog teoremy Liuvillya dlya simmetricheskikh prostranstv s otritsatel'noy kriviznoy)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 6, pp 1187 - 1189 (USSR)

ABSTRACT: Let G be a semisimple real or complex Lie group ; $K \subset G$ its maximum compact subgroup ; $E = G/K$ the corresponding symmetric space. On E there exists a ring of Laplace operators being adjustable with the Lie operators on E (see Gel'fand, I.M. [Ref 1]). Let $\Delta_2, \ldots, \Delta_k$ be the generators in the ring of the Laplace operators. A function which satisfies the equation $\Delta_2 u = 0$ is called harmonic. If a function satisfies the equations $\Delta_k u = 0$, where Δ_k is an arbitrary operator from the generator system, then the author denotes it polyharmonic.
Theorem : Every bounded harmonic function on E is polyharmonic.

Card 1/2

Zonal Spherical Functions and Laplace Operators on Some Sym- 20-118-1-1/58
metric Spaces

cible representations in the spaces $\mathfrak{M}^{+}_{n,k}$, $\mathfrak{M}^{-}_{n,k}$ and $\mathfrak{M}^{o}_{n,k}$. 1 Soviet and 1 foreign reference are quoted.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova (Moscow State University imeni M.V.Lomonosov)

PRESENTED: June 24,1957 by P.S. Aleksandrov, Academician

SUBMITTED: June 21,1957

AVAILABLE: Library of Congress

Card 2/2

AUTHOR: BEREZIN, F.A. and KARPELEVICH, F.I. 20-118-1-1/59

TITLE: Zonal Spherical Functions and Laplace Operators on Some Symmetric Spaces (Zonal'nyye sfericheskiye funktsii i operatory Laplasa na nekotorykh simmetricheskikh prostranstvakh).

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol 118, Nr 1, pp 9-12 (USSR)

ABSTRACT: Let $\mathfrak{M} = G/H$ be a homogeneous space with compact stationary subgroup H. As a Laplace operator on $\mathfrak{M}$ according to Gel'fand [Ref.1] a differential operator Δ is denoted which commutates with the translation operators. Let R be the manifold of the functions on $\mathfrak{M}$ which are constant on the transitivity surfaces of the subgroup H. Each Laplace operator induces a certain differential operator on R; This is denoted as the radial part of Δ, in symbols $\mathring{\Delta}$. Let the space $\mathfrak{M}^+_{n,k}$ $(n \geqslant 2k)$ be the manifold of the k-dimensional subspaces of the n-dimensional complex space; let $\mathfrak{M}^-_{n,k}$ be dual to $\mathfrak{M}^+_{n,k}$ according to Cartan and finally let $\mathfrak{M}^0_{n,k}$ be the space of all complex matrices with k-lines and n-k rows. In the present paper the author calculates the $\mathring{\Delta}$ of the Laplace operators Δ and the zonal spherical functions belonging to the irredu-

Card 1/2

F.A. Berezin

16(1)

AUTHORS: Skoryy, I.A., University Lecturer, and Kopytov, V.D., Scientific Assistant

SOV/55-58-2-33/35

TITLE: Lomonosov - Lectures 1957 at the Mechanical-Mathematical Faculty of Moscow State University (Lomonosovskiye chteniya 1957 goda na mekhaniko-matematicheskom fakul'tete MGU)

PERIODICAL: Vestnik Moskovskogo Universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958 Nr 2, pp 241-246 (USSR)

ABSTRACT: The Lomonosov lectures 1957 took place from October 27 - October 31, 1957 and were dedicated the 40-th anniversary of the October revolution.

16. A.D. Gorbunov, Lecturer and B.M. Budak, Lecturer : Difference Methods for the Solution of Hyperbolic Equations.
17. N.S. Bakhvalov : Number of Calculation Operations for the Solution of Elliptic Equations.
18. V.I. Lebedev, Aspirant : Difference Method for the Solution of the Sobolev-System.
19. Professor Ye.B. Dynkin : Markov Processes and Semigroups.
20. A.G. Kostyuchenko, Candidate of Physical-Mathematical Sciences : Decomposition of Differential Operators With Respect to Generalized Eigenfunctions.
21. F.A. Berezin, Candidate of Physical-Mathematical Sciences: Foundations of the Theory of Spherical Harmonics on Manifolds.
22. V.M. Borok, Aspirant : General Properties of Partial Evolution Systems.
23. V.A. Uspenskiy, Candidate of Physical-Mathematical Sciences : On Constructive Mathematical Analysis.
24. P.L. Ul'yanov, Lecturer : Reversal of Terms in Trigonometric Series.
25. I.G. Petrovskiy, Academician and Ye.M. Landis, Senior Scientific Assistant : On the Number of Boundary Cycles of a Differential Equation of First Order With a Rational Right Side.

The contents of all the lectures have already been published.

Card 5/5

(12)

GEL'FAND, Izrail' Moiseyevich; MINLOS, Robert Adol'fovich; SHAPIRO, Zorya Yakovlevna; BEREZIN, F.A., red.; STEBAKOVA, L.A., red.; GAVRILOV, S.S., tekhn.red.

[Representation of rotation and Lorentz groups and their use] Predstavleniia gruppy vrashchenii i gruppy Lorentsa, ikh primeneniia. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1958. 368 p. (MIRA 12:5)

(Groups, Theory of) (Quantum theory)

connection. Let ∇_k be the operators of the covariant differentiating formed with the aid of this connection, and let $q^{i_1 \ldots i_k}(x)$ be an invariant symmetric tensor field on $\mathfrak{M}$. Then the following theorem is valid: The operator

$$(1) \qquad (q) = \sum_{i_1 \cdots i_k} q^{i_1 \ldots i_k} \nabla_{i_1} \ldots \nabla_{i_k}$$

is a Laplace operator on $\mathfrak{M}$, where every Laplace operator on $\mathfrak{M}$ can be represented uniquely as a sum of the operators (1).
This paper is a direct continuation of earlier papers of the author (Doklady Akad.Nauk 107, 1,(1956)) and of Gel'fand (Doklady Akad.Nauk 50, 1, (1950)).

BEREZIN, F.A.

SUBJECT V/SSR/MATHEMATICS/Functional analysis CARD 1/2 PG - 802
AUTHOR BEREZIN F.A.
TITLE Laplace operators on semi-simple Lie groups and on some symmetrical spaces.
PERIODICAL Uspechi mat.Nauk 12, 1, 152-156 (1957)
reviewed 6/1957

Let $\mathfrak{M} = \mathcal{G}/\mathcal{G}_0$ be a homogeneous manifold with the motion group $\mathcal{G}$ and a stationary subgroup $\mathcal{G}_0$. In the function space on $\mathfrak{M}$ the operators T_g are defined: $T_g f(x) = f(g^{-1}x)$. The differential operators on $\mathfrak{M}$ which commutate with T_g are denoted as Laplace operators on $\mathfrak{M}$. Let $\mathring{R}$ be the set of the function f on $\mathfrak{M}$ for which from $f \in \mathring{R}$ and $g \in \mathcal{G}_0$ there follows: $f(gx) = f(x)$. The operator which in $\mathring{R}$ is induced by the Laplace operator Δ, is called radial part of Δ and is denoted by $\mathring{\Delta}$. In the present paper the radial parts of the Laplace operators on compact semi-simple groups, on complex semi-simple groups, on some symmetric manifolds with zero curvature etc. are described and some general properties of the Laplace operators are formulated. Let e.g. $\mathfrak{M}$ be an arbitrary homogeneous manifold with an invariant affine

BEREZIN, F.A.

Correction of the article "Remarks on the theory of spherical function on symmetrical Riemann manifolds." (Trudy Mosk.mat.ob-va vol.5, 1956). Trudy Mosk.mat.ob-va 6:486 '57. (MIRA 10:11)
(Functions)

BEREZIN, F.A.

Laplace operators in Lie's semisimple groups. Trudy Mosk.mat.ob-va 6:371-463 '57. (MIRA 10:11)
(Operators (Mathematics)) (Groups, Theory of)

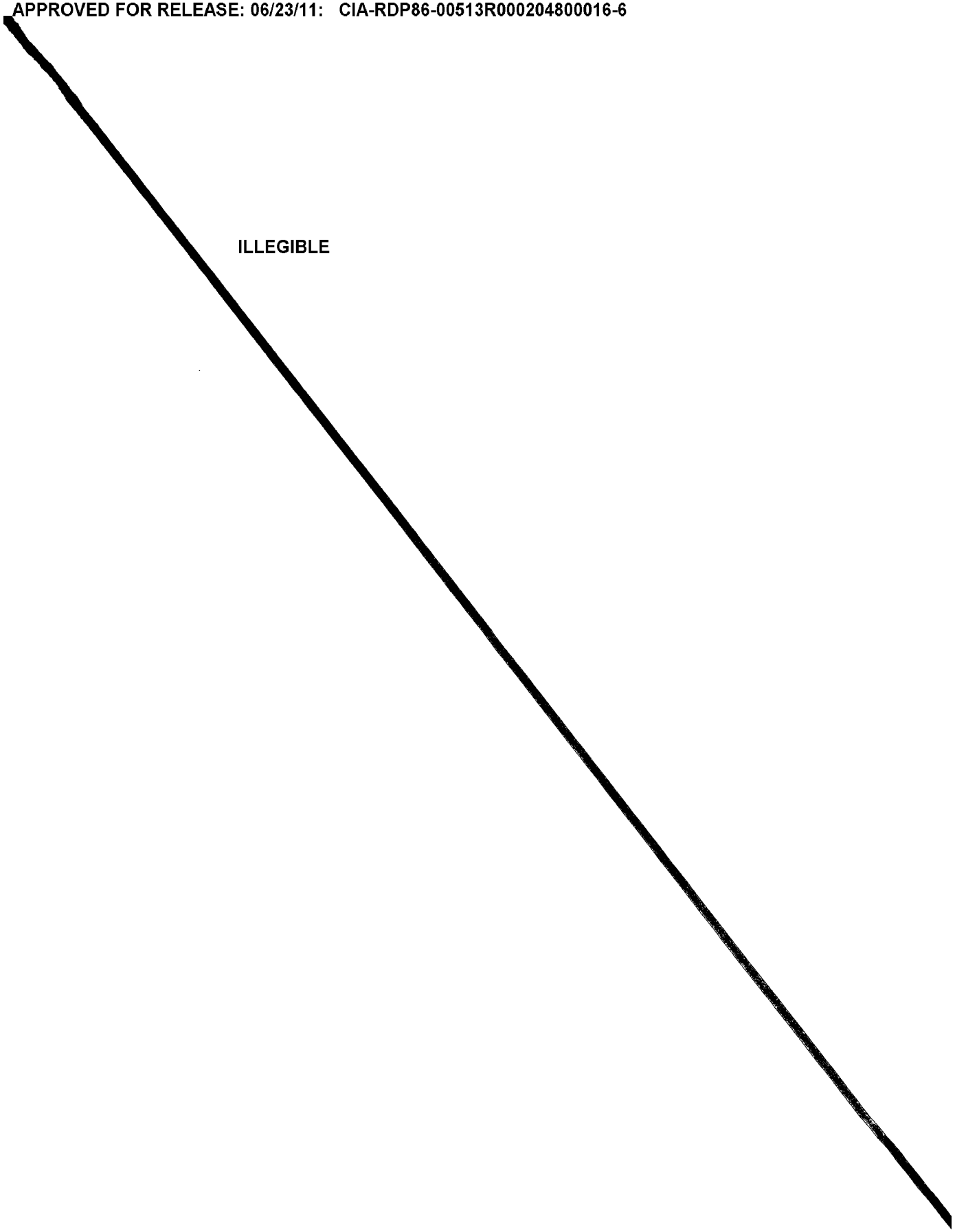
TANATAR, I.Ya. (Moscow); SKOPETS, Z.A. (Yaroslavl'); ARNOL'D, V.I. (Moscow); DYNKIN, Ye.B. (Moscow); LORDKIPANIDZE, B.G.(L'vov); KONSTANTINOV, N.N. (Moscow); BERRZIN, F.A.(Moscow)

Problems of elementary mathematics. Mat. pros. no.2:267-270 '57. (MIRA 11:7)

(Mathematics--Problems, exercises, etc.)

BEREZIN, F. A. Cand Phys-Math Sci -- (diss) "Laplace operators on (Lie's) semielementary groups." Mos, 1957. 10 pp 20 cm. (Min of Higher Education USSR. Mos Order of Lenin and Order of Labor Red Banner State U im M.V. Lomonosov. Mechanical-Math Faculty), 100 copies (KL, 14-57, 85)

ILLEGIBLE



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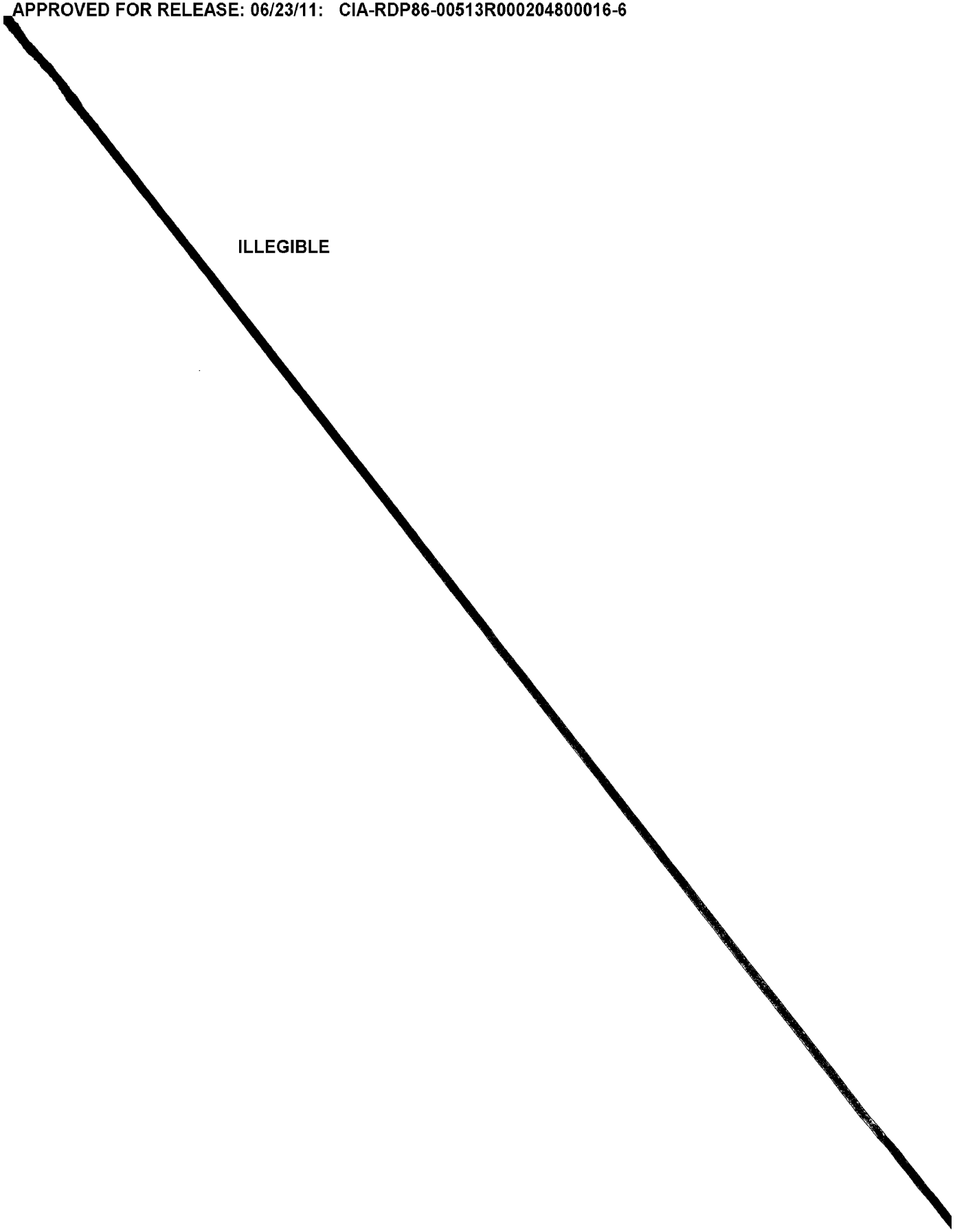

BEREZIN, F.A.

Laplace operators on semisimple Lie groups. Dokl.AN SSSR 107 no.1: 9-12 Mr '56. (MLRA 9:7)

1.Predstavleno akademikom M.V.Keldyshem.
(Groups, Theory of) (Spaces, Generalized)

BEREZIN, F.A.; GEL'FAND, I.M.; GRAYEV, M.I.; NAYMARK, M.A.

Representation of groups. Usp.mat.nauk 11 no.6:13-40 N-D '56.
(MLRA 10:3)

(Groups, Theory of)

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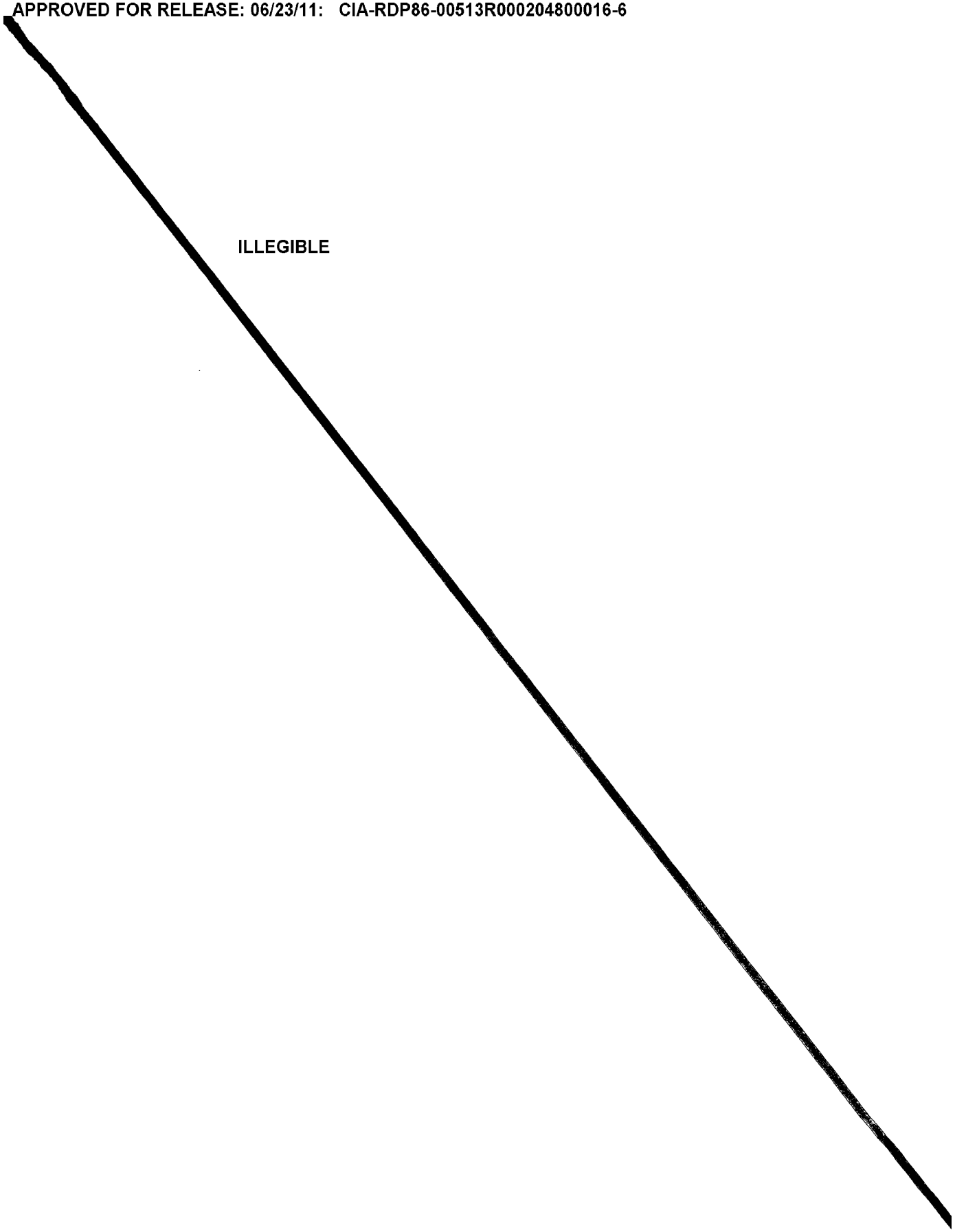

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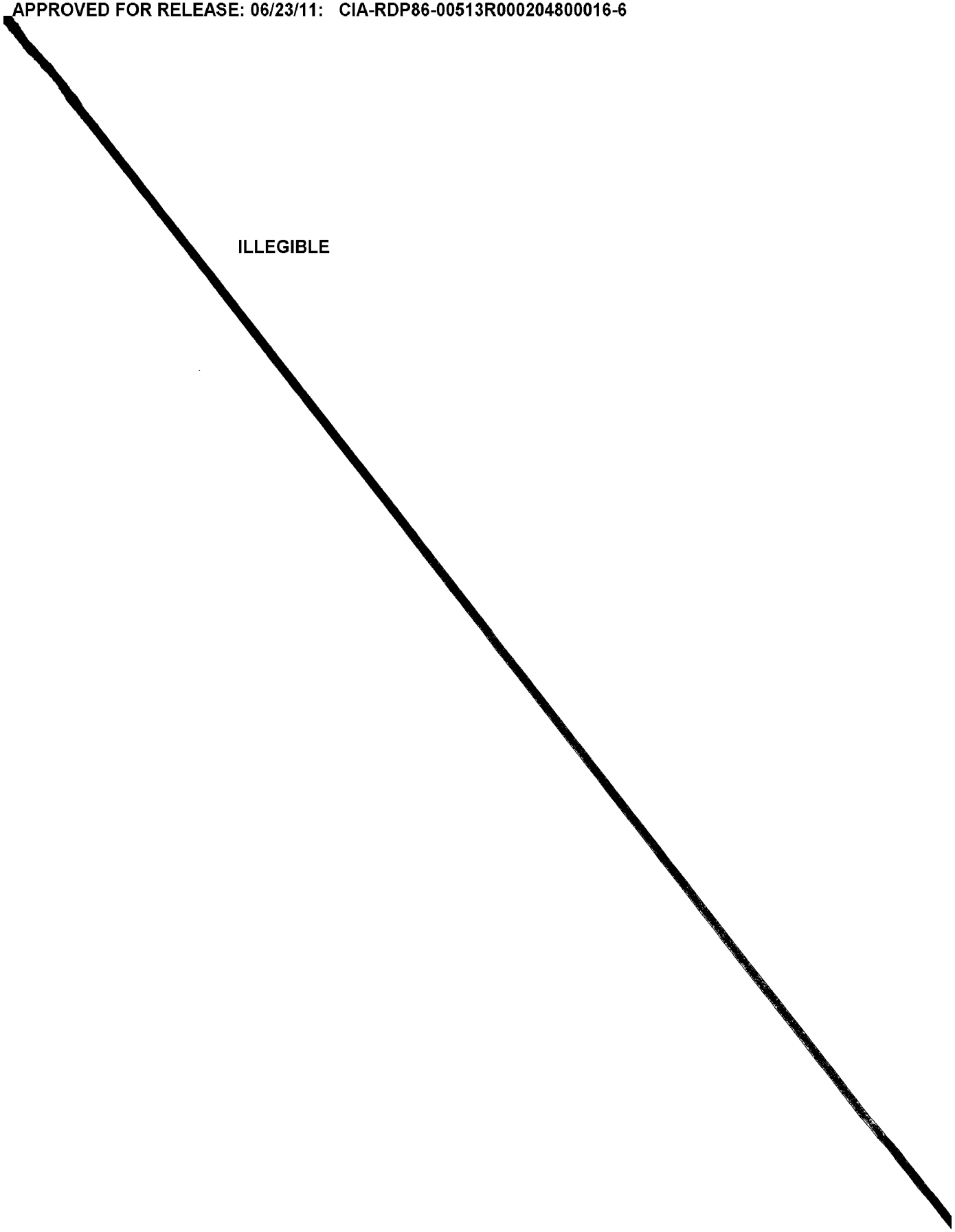

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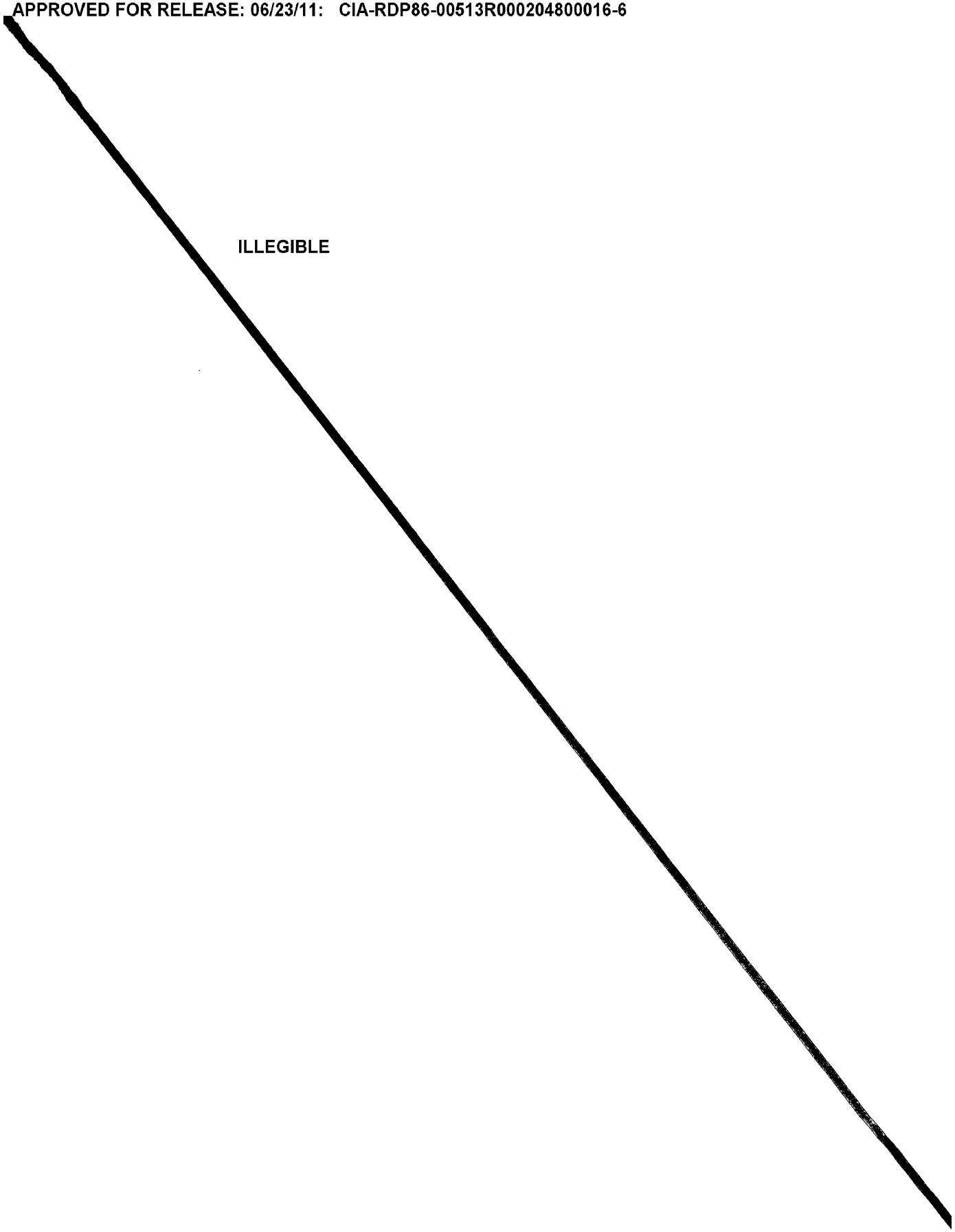

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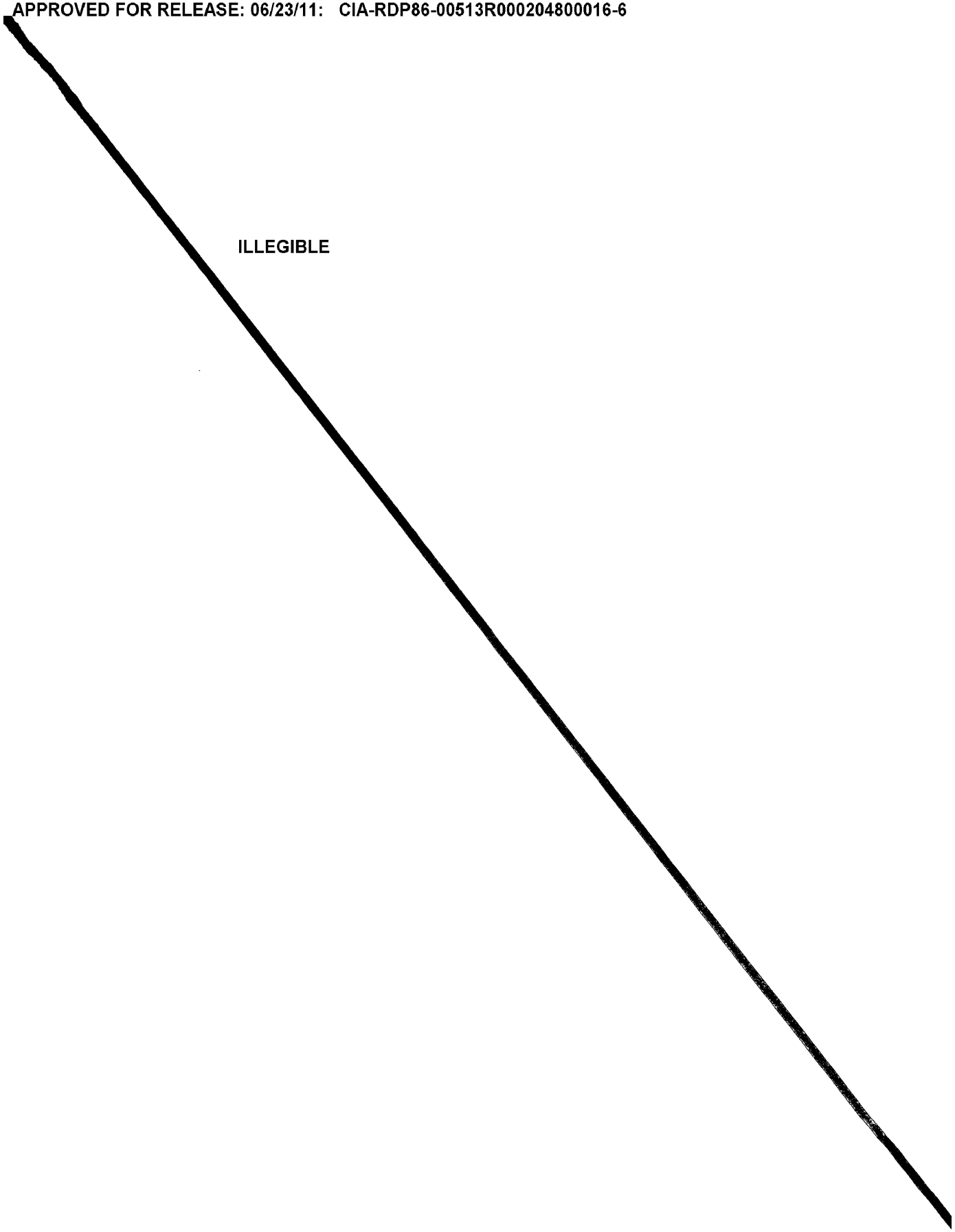

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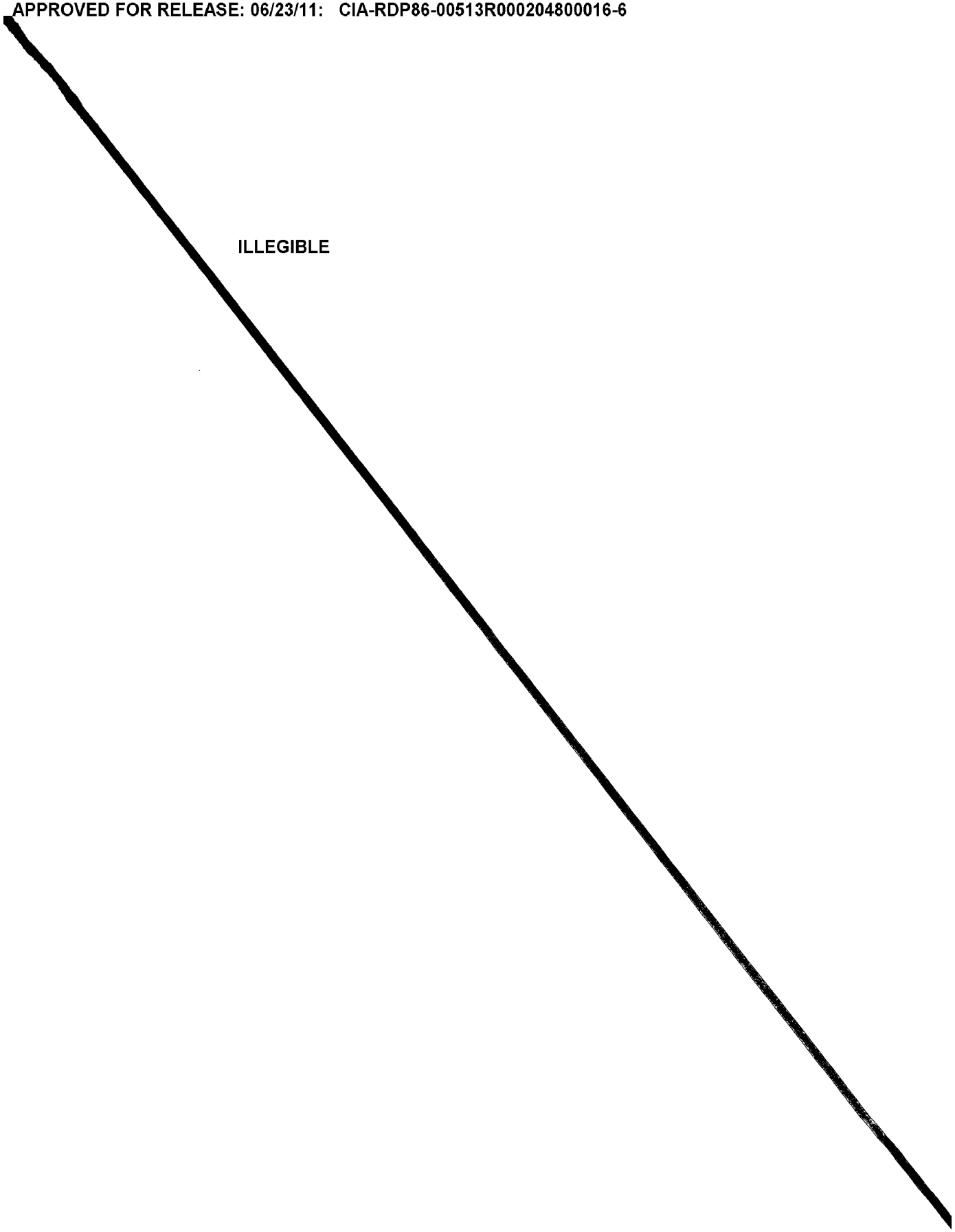

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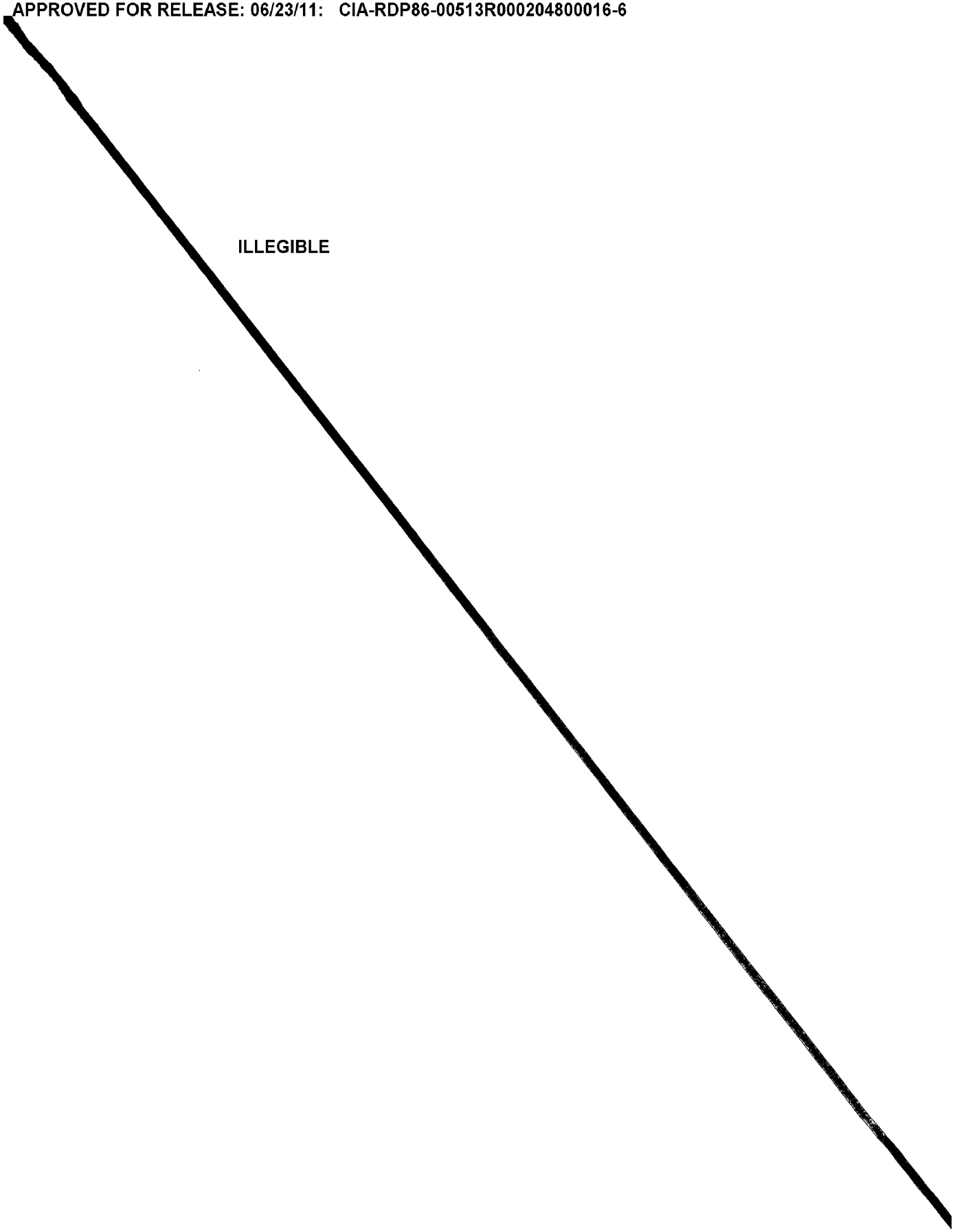

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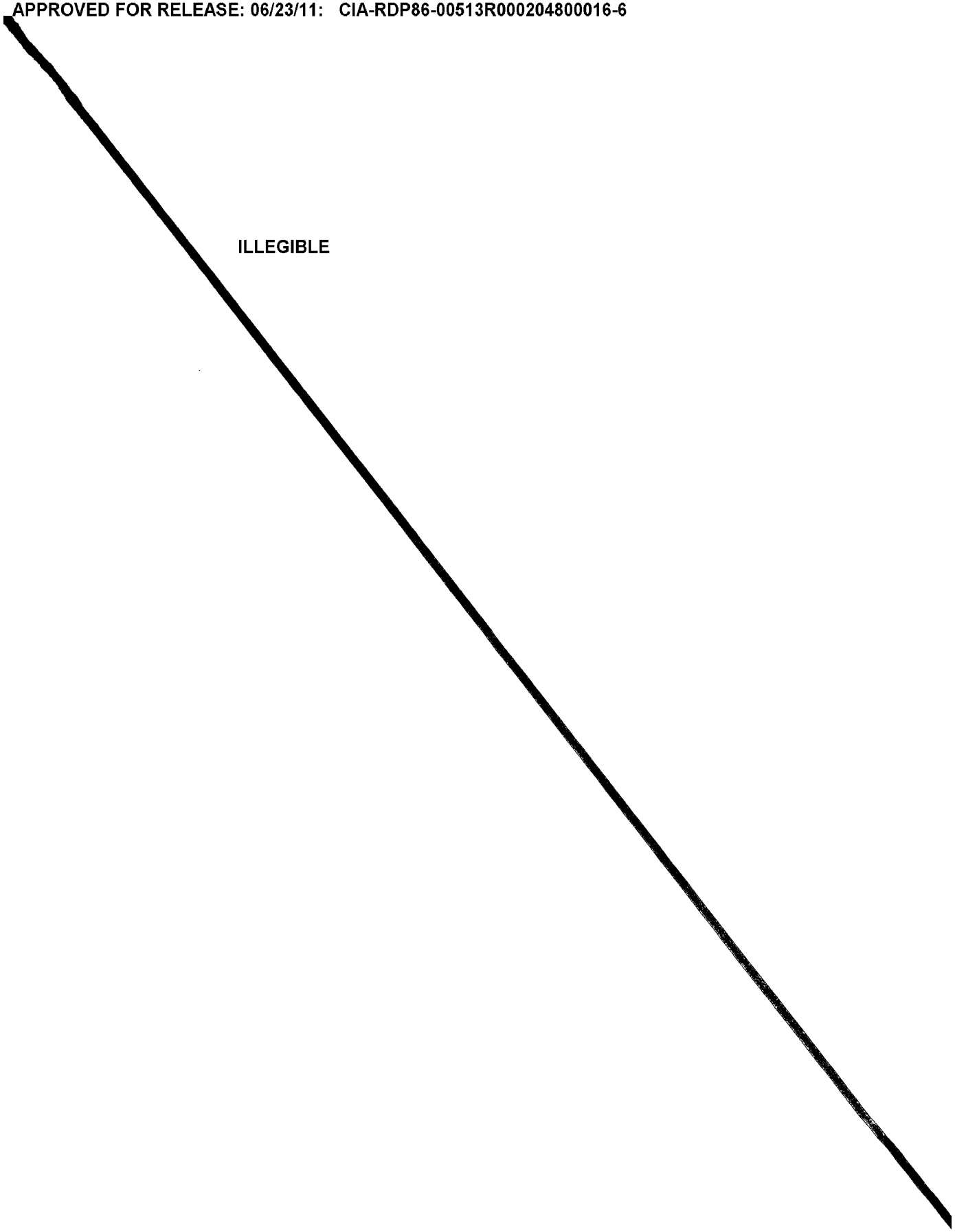


L 3541-66
ACCESSION NR: AP5024410

axis of the arresting device, a template is installed which imparts a forward motion to a stop spring. The spring is kinematically coupled to the template and presses the end part of the pendulum knife edge onto a fixed support rigidly coupled to the support plate. For remote control of the pendulums, electric drives are mounted on the support, which are controlled from the panel and are kinematically coupled to the arresting and locking devices and the stop spring. To control the initial amplitudes and phases of the oscillation of the middle pendulum, an additional triggering lever with a driving frame is installed. To maintain the position of the center of gravity of the device when rewinding the film, a compensator is installed. The compensator is in the form of a weight moving with film feed along a screw which is kinematically coupled to the axle of the film spool. To simplify the arresting of the Cardan suspension, the arrestor in the form of a screw with a control wheel clamps the outer ring of the Cardan suspension through a plate of the inner ring to the support on the stand. To record the readings of a mercury thermometer on the common photorecord, an anamorphic adaptor is mounted on the support. Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 19Feb63

NO REF SOV: 000 ENCL: 01 SUB CODE: ES

Card 2/2 OTHER: 000

L 3541-66 EWT(1) GW

ACCESSION NR: AP5024410 UR/0286/65/000/015/0089/0090

AUTHORS: Kheyfets, M. Ye.; Terekhov, V. P.; Slivin, Yu. A.; Zdobnikov, Ye. T.; Ivanova, A. A.; Beresin, E. M.

TITLE: Device for measuring the gravitational force. Class 42, No. 173435

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 89-90

TOPIC TAGS: gravimeter, submarine

ABSTRACT: This Author Certificate presents a device for measuring the gravitational force from submarines and drifting ice. The device contains three quartz-metal pendulums mounted on the base plate of a thermostated support placed in an arrested Cardan suspension, arresting and locking devices for the pendulums, thermometers, a hygrometer, a triggering lever for each pendulum, a device for applying time marks to the photorecord of the pendulum oscillations, a control panel, and perturbing acceleration detectors. To increase the accuracy of the measurements and to simplify their processing, additional mirrors are mounted on the support plate so that the images of the transmitting diaphragms reflected from the outer pendulums are produced in the focal plane of the objective (see Fig. 1 on the Enclosure). To insure the uniform setting of the pendulums on the

Card 1/2

ACCESSION NR: AR4036342

discrepancies (-1.3 ± 2.2 mgal). Introduction of a correction for horizontal accelerations leads to large systematic errors. P. Shokin.

DATE ACQ: 17Apr64

SUB CODE: AS

ENCL: 00

Card 3/3

ACCESSION NR: AR4036342

In 1960 a model of the shipboard pendulum instrument was constructed; it includes a four-pendulum support, a gyroframe and a horizon photorecorder (see Sb. ref. Tsentr. n.-i. in-t geod., aeros"yemki i kartogr., 1962, no. 32, 21-23). A film 19 cm wide is used for recording four real and two fictitious pendulums and also the vertical accelerometer. The records of the horizon photorecorder are used for control of instrument stabilization and determination of the accuracy of operation of the gyrostabilized platform. Synchronization of all the records is accomplished using a quartz clock. Tests of the model of the shipboard pendulum instrument were made aboard a vessel with a displacement of 6,000 tons. Ninety stations were determined, of which 26, insofar as possible, coincided with stations where pendulum observations were made aboard a submarine. For 26 control stations the Brown corrections for horizontal accelerations averaged -81 mgal and for vertical accelerations +125 and ±134 mgal respectively. Corrections for vertical accelerations at all control points improve the results of surface measurements and the differences in anomalies agree with submarine measurements with a mean square error of ±11 mgal with an absence of systematic

Card 2/3

ACCESSION NR: AR4036342 S/0169/64/000/003/G025/G025

SOURCE: Referativny*y zhurnal. Geofizika, Abs. 3G163

AUTHOR: Kheyfets, M. Ye.; Malakhov, B. M.; Berezin, E. M.

TITLE: Experience in gravity measurement on shipboard

CITED SOURCE: Sb. ref. Tsentr. n.-i. in-t reqd., aeros"emki i kartogr., vy*p. 32, 1962, 24-29

TOPIC TAGS: gravimetry, gravimeter, pendulum measurement, gravimetric survey, geophysical instrument

TRANSLATION: An experimental apparatus has been designed for gravimetric observations with a pendulum instrument on shipboard. The apparatus is equipped with a device for centering, arresting and locking the pendulums while being transported in their supports. The apparatus was adapted to a N-55 gyrostabilized platform and experimental measurements were made on shipboard. The pendulums make it possible to make measurements when there are waves at sea up to class 4-5. Pendulum periods are determined with sufficient accuracy from the photogram.

Card 1/3

BEREZIN, E.M.; KUZIVANOV, V.A.

Nomograms for determining corrections for the amplitude, temperature, depth of submersion, the Eotvos effect and for determining the coefficient of swaying in pendulum observations at sea. Trudy Inst. fiz. zem. no.8:72-79 '59 (MIRA 13:3)
(Nomography (Mathematics)) (Pendulum)

Berezin, E.M.

PHASE I BOOK EXPLOITATION SOV/3681

Akademiya nauk SSSR. Institut fiziki zemli

Voprosy instrumental'noy gravimetrii; [sbornik] (Problems of Instrument Gravimetry; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 76 p. (Series: Its: Trudy, No. 8/175/) Errata slip inserted. 1,500 copies printed.

Ed.: Yu. D. Bulanzhe, Doctor of Physical and Mathematical Sciences; Ed. of Publishing House: V.G. Berkgaut; Tech. Ed.: Yu.V. Rylina.

PURPOSE: This publication is intended for geophysicists, physicists, hydrographers, geodesists, and navigators.

COVERAGE: This is a collection of eight articles dealing with gravimetric instruments used in oceanographic investigations. Descriptions of the instruments and data on test results are given. No personalities are mentioned. References appear at the end of some of the articles.

AVAILABLE: Library of Congress

USSR / Forestry. Dendrology.

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24873. K-2

Abstract: and by artificial flooding of the sections (assistance to natural renewal). Recommendations for felling of mature trees are given. It is observed that fellings that were carried out earlier in dense wood-cutting areas had worsened the forest-growing conditions, and therefore deliberately-selected fellings are advisable. As the main stock for forest cultures, the Sogdianskiy ash-tree is recommended. Some recommendations on the agro-technics of saplings are produced.

Card 3/3

USSR / Forestry. Dendrology.

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24873. K-2

Abstract: upper river-valley. It is established that the ash-tree renews itself successfully in osier-beds, in the ash and poplar groves of the lower river-valley, by the density of cover of 0.8, worse - with 1.0. In the pure ash groves of the upper river-valleys (main type of forest), a satisfactory renewal of the ash-tree was observed in the inundated sections and is absent in those not inundated. The renewal of seed of the ash-tree in the cuttings is absent, and they are renewed with undergrowth. Renewal of other stocks (poplar, turanga, oleaster and others) is markedly worse than of the ash-tree. It is shown that plantings display signs of dying out. The preservation of the forest may be achieved by creation of close plantings in those areas where they disappeared,

Card 2/3

USSR / Forestry. Dendrology.

K-2

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24873.

Author : ~~Berezin, E. L.~~
Inst : Not given.
Title : Renewal of Ash Forests of the Bottomland of the Charyn River.

Orig Pub: Tr. In-ta botan. ANKaz SSR, 1957, 5, 132-161

Abstract: Renewal of the ash-tree was observed according to the following types of the forests of Charyn (Kazakhstan): osier-bed of the lower river-valley, the ash-tree of the lower river-valley, the poplar of the lower river-valley, the poplar ash-tree of the upper river-valley and the poplar-ash-tree of the

Card 1/3

USSR/Forestry - Forest Cultures.

K.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15397

in dense stands. The effect of mineral fertilizers appears when they are applied at the rate of N60, P_2O_5 80, and K_2O 40. The standard sapling size was reached in two years growth. One recommends mulching for the splantings, shading the sowings, irrigating the saplings in their first year of life, making the soil friable and snow retention.

Card 2/2

BEREZIN, E. L.

USSR/Forestry - Forest Cultures.

K.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15397

Author : K.A. Pashkovskiy, E.L. Berezin
Inst : -
Title : The Cultivation of Pine Saplings in the Pine Wood Belts of the Irtysh River Region.
(Vyrashchivaniye seyantsev sosny v lentochnykh borakh Priirtysh'ya).

Orig Pub : Izv. AN KazSSR, ser. biol., 1957, vyp. 1, 37-48

Abstract : Two years experiments have been conducted on raising pine trees at the experimental nursery of Semipalatinsk Forestry Suburban Wood. The various agrotechnical methods were studied. It was established that the fall is the best time to plant pine; the best method of planting is by the four-strip system. The saplings develop best when the density stand is 80-100 specimens per 1 meter of strip, attained by thinning the saplings

Card 1/2

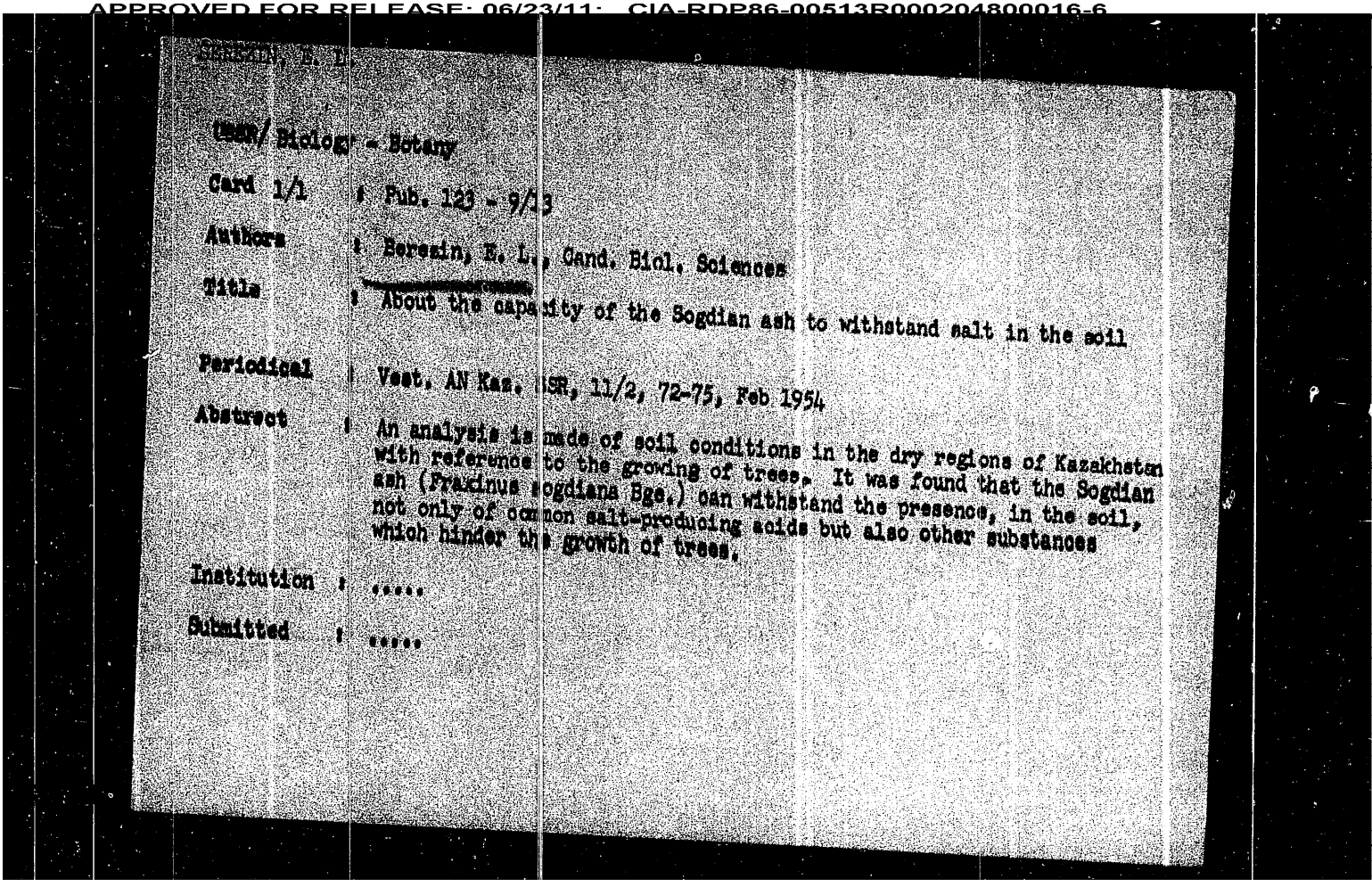
33

BEREZIN, E.L.

Ash forests on the Charyn bottom lands. Trudy Inst. bot. AN Kazakh. SSR 3:102-124 '56.

(MLRA 9:10)

(Charyn Valley--Ash (Tree))



BEREZIN, B. L.

USSR/ Biology - Botany

Card 1/1 : Pub. 123 - 9/13

Authors : Berezin, B. L., Cand. Biol. Sciences

Title : About the capacity of the Sogdian ash to withstand salt in the soil

Periodical : Vest. AN Kaz. SSR, 11/2, 72-75, Feb 1954

Abstract : An analysis is made of soil conditions in the dry regions of Kazakhstan with reference to the growing of trees. It was found that the Sogdian ash (Fraxinus sogdiana Bge.) can withstand the presence, in the soil, not only of common salt-producing acids but also other substances which hinder the growth of trees.

Institution : .....

Submitted : .....

LEBEDEV, V.P., inzh.; BEREZIN, D.V., inzh.

Production of high pressure pipes from concrete on carbonate aggregates. Stroi. mat. 9 no.8:14-15 Ag'63.
(MIRA 17:5)

BEREZIN, D.V., inzh.; GALAKTIONOV, V.I., inzh.

Influence of the forms of aggregates upon the strength of concretes and mortars. Stroi. mat. 9 no.7:15-17 Jl '63.
(MIRA 16:11)

BEREZIN, D. S.

Komandir transporta i bor'ba za distsiplinu [The commander of transportation and the struggle for discipline]. Moskva, Gos. transp. zhel-dor. izd-vo, 1945. 31 p.
DLC: HE3136.B38

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952, Unclassified.

BEREZIN, D.P.

Some problems in the representation of hydrographic networks and hydraulic structures on topographic maps. Geod.i kart. no.8:33-37 Ag '61. (MIRA 14:10)

(Cartography)

BEREZIN, D.P.

Reduction of water marks to low-water stage. Geod. i kart. no.9: 41-47 S '60.
(Hydrographic surveying) (MIRA 13:11)

3(2)

AUTHOR: Berezin, D. P.

TITLE: On the Article by A. I. Preobrazhenskiy Entitled "Enrichment of Topographic Maps With Economic Indices" (O stat'ye A. I. Preobrazhenskogo "Obogashcheniye topograficheskikh kart ekonomicheskimi pokazatelyami")

SOV/6-59-6-16/22

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 6, pp 60-61 (USSR)

ABSTRACT: In the paper (Ref 1) by Preobrazhenskiy, it is suggested to show on topographic maps the boundaries of soil exploitation in kolkhozes and sovkhozes, the order of seeds, the livestock, and to designate the industry by a unified sign. Berezin does not agree to this, and substantiates his disagreement as follows: By virtue of analogy, the experts of other special branches could demand the same, which would certainly lead too far, and would only interest a small circle of persons; the map, however, would be overloaded and unclear. Preobrazhenskiy looks at the map with the eyes of an economic geographer, which is well intelligible but cannot be considered in the present case. In this connection, some passages of the paper by Preobrazhenskiy are dealt with, and it is pointed out that the individual suggestions are not reasonable. There is 1 Soviet reference.

Card 1/1

growth. From plans of reforestation the principal types of trees and their age can be determined. Plans of reforestation and sylvicultural graphs cannot be considered as first-class cartographical materials. An enlarged topographical map is twice as accurate as a plan compiled according to forest[illegible] plane-table sheets. The basis for the compilation of reforestation plans and sylvicultural graphs must always be the topographical map. It is shown that it would be of advantage to dispense with the conception of "forest density" and to work on the basis of the distances between trees instead. There are 2 tables and 1 reference, which is Soviet.

1. Forestry---USSR 2. Mapping---Materials 3. Maps---Effectiveness

Card 2/2

AUTHOR: Berezin, D. P.

TITLE: On Forest Cartographical Material and Its Use in Topographical Cartography (O kartograficheskikh materialakh lesnogo khozyaystva i ikh ispol'zovanii pri topograficheskom kartografirovanii)

SOV/6-58-8-9/15

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 8, pp. 49-55 (USSR)

ABSTRACT: The present paper investigates several problems connected with the utilization of forest cartographical material for topographical work; a characteristic is given of the said material, which is not without faults and is in need of being improved essentially. The basic cartographical material are the plane-table sheets, which are produced in two kinds of finish: one for sylviculture and the other for forestry. For topographical use the plane-table sheets are used for the identification of arable land, forest clearings, cuttings in woods, swamps, and undergrowth. The characteristics of forests (height and thickness of the trunks of trees, density of forests) must be obtained from descriptions made on the basis of estimates. The same applies to data concerning the nature of swamps, the vegetation in cuttings in woods and burned-down areas, and the height of under-

Card 1/2

On the Reduction of the Actual Water Level Measurements in Rivers to the Normal Level

6-1-7/16

meteorological Service"). According to the instruction it is sufficient to take the data from the last 5 to 10 years. The normal water levels were in fact equal during 5 and 15 years on the rivers Sukhona, Yug, Malaya Severnaya Dvina). The average normal water levels for many years were already computed for some water level indicators and they are registered in the "Data for the Hydrography of the Rivers of the USSR" (Hydrological State Institute of the Hydrometeorological Service of the USSR) and in the territorial offices of the hydrometeorological service. Some hydrographical offices, especially the "Ministry of River-Navigation" employs an other term: "zero of depth" which corresponds approximately to the conception of the average normal water level. The definition for the normal water level (mezhen') according to the great Soviet encyclopedia is given. It is shown how normal water levels of a river can be determined in the most simple way and this is explained by means of an example. There are 1 table, and 3 references, all of which are Slavic.

AVAILABLE: Library of Congress

Card 2/2

Berezin, D.P.

AUTHOR: Berezin, D. P. 6-1-7/16

TITLE: On the Reduction of the Actual Water Level Measurements in Rivers to the Normal Level (O privedenii otmetok urezov vody v rekakh k mezhennomu urovn_yu)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 1, pp. 50 - 54 (USSR)

ABSTRACT: One of the provisions in the "instruction on topographic photographs on the scale 1 : 10 000 and 1 : 25 000" (1956, part I, § 42) says that the respective water level measurements in both rivers and lakes must be reduced to the average normal level of many years. Until recently, questions of hydrological base problems were not raised at all in the cartographical mapping of water objects. Practically, the tidal signals are principally used by hydrologists and hydrographers. But for putting an end to the mischances and divergencies the water level at the time being should in each case be reduced to the normal level. The daily reports on the water level which are published in the "Hydrological Annuals" according to the water reservoirs (Publishers of the "Central Office of the Hydro-

Card 1/2

BEREZIN, D.A.

Using radiometric methods to solve some geological problems.
Geofiz. razved. no.9:80-90 '62. (MIRA 15:9)
(Radioactive prospecting)

BEREZIN, B.V.; ZOROKHOVICH, G.Ya.

Screenless separation of the 0-3 mm. class from average coals prior to crushing. Koks. i khim. no. 3:57-58 '61. (MIRA 14:4)

1. Ural'skiy politekhnicheskiy institut (for Berezin). 2. Nizhne-Tagil'skiy metallurgicheskiy kombinat (for Zorokhovich).
(Coal handling)

CHERNOV, V.N.; EPSHTEYN, M.I.; BEREZIN, B.V.; KOLBASOV, A.N.

A device for the measurement of the illumination of microorganisms in different spectral regions, 300-1,000 mmm.
Mikrobiologiia 33 no.1:172-175 Ja-F '64. (MIRA 17:9)

1. Institut mikrobiologii AN SSSR.

BEREZIN, B.V.; TITOVA, L.L.

Sorting of coal by coarseness in a horizontal air stream.
Koks. i khim. no.12:6-8 '63. (MIRA 17:1)

1. Ural'skiy politekhnicheskiy institut.

CHERNOV, V.N.; BEREZNIKOV, V.M.; BEREZIN, B.V.

Automation of sterile dosing of liquid media. Vest. AN SSSR 33 no.11:80-81 N '63. (MIRA 17:1)

1. Institut mikrobiologii AN SSSR.

BEREZIN, B.V., kand. tekhn. nauk

Useful textbook. Koks i khim. no.7:63-64 '63. (MIRA 16:8)

1. Ural'skiy politekhnicheskiy institut.
(Coke industry—Equipment and supplies)

BEREZIN, Boris Vasil'yevich; ZUYEV, S.D., retsenzent; UKHOV, L.P., red.; KRYZHOVA, M.L., red.izd-va; MAL'KOVA, N.T., tekhn.red.

[Repair of the equipment of by-product coke plants]Remont koksokhimicheskogo oborudovaniia. Sverdlovsk, Metallurgizdat, 1962. 237 p. (MIRA 16:1)
(Coking plants—Equipment and supplies)

BOGDANOV, Aleksandr Ivanovich [deceased]; BEREZIN, B.V., red.; VOLGIN, B.P., red.; GOVORKOV, V.M., red.; DOLGANOV, Ye.A., red.; LEVCHENKO, P.V., red.; RONZHIN, S.N., red.; SOMOVA, T.M., red.; DUGINA, N.A., tekhn. red.

[Machinery for cement plants] Mekhanicheskoe oborudovanie tsementnykh zavodov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 384 p. (MIRA 14:9)
(Cement plants—Equipment and supplies)

BEREZIN, B.V.

Effect of the angular velocity of the rotor of a hammer-crusher on its performance. Trudy Ural politekh. inst. no.76:158-162 '60. (MIRA 16:6)

(Crushing machinery)

A.Ya. Shapiro, Maintenance Technology of the Equipment of Chemical Works, Goskhimizdat, 1958, 368 Pages SOV/64-59-4-26/27

considered recommendable not only for maintenance workers of the factories concerned, but also for students of the corresponding special branches.

Card 2/2

5(1) SOV/64-59-4-26/27

AUTHOR: Berezin, B. V., Candidate of Technical Sciences

TITLE: A. Ya. Shapiro, Maintenance Technology of the Equipment of Chemical Works, Goskhimizdat, 1958, 368 Pages (A. Ya. Shapiro, Tekhnologiya remonta oborudovaniya khimicheskikh zavodov, Goskhimizdat, 1958, 368 str.)

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 4, pp 89-90 (USSR)

ABSTRACT: The book mentioned in the title is reviewed. The first paragraph deals with the general maintenance technology of the apparatus of chemical works, while the second paragraph is concerned with the maintenance of individual machines - compressors, centrifuges, drums, crushing machines, et al. It is pointed out that the book deals with enough questions, the second paragraph should but be considerably extended, and the first shortened. Some examples for what should be dealt with more in detail are given and it is stated that conveying implements, pipings, protective coloring, and lubricating devices are not mentioned at all. Some erroneous interpretations in the text are explained, and finally some modifications and improvements of individual passages are recommended. Apart from the shortcomings mentioned the book is

Card 1/2

68-58-5-12/25

On the Influence of the Moisture Content of Feed Material on the Removal of Product from a Hammer Mill

An increase in the moisture content of coal blend is accompanied with increasing force required for it to be pushed through an opening. The coefficient of friction coal blend - coal blend of the same moisture content is somewhat higher than that of the system coal blend - steel. Thus, in a hammer mill with screens made from steel sheets, the removal of product (under other conditions constant) requires less energy than in a mill with a normal screen. There are 3 tables.

ASSOCIATION Ural'skiy politekhnicheskiy institut (Ural Polytechnical Institute)

Card 2/2

AUTHOR: Berezin, B.V.

68-58-5-12/25

TITLE: On the Influence of the Moisture Content of Feed Material on the Removal of Product from a Hammer Mill (O vliyanii vlazhnosti materiala na usloviya evakuatsii produkta iz molotkovoy drobilki)

PERIODICAL: Koks i Khimiya, 1958, Nr 5, pp 43 - 45 (USSR)

ABSTRACT: The relative proportions of crushed coal passing through clean and partly blocked screens of an industrial hammer mill were determined (Table 1), using normal screens and a grid from sheet steel. The results indicated that blocking of screens considerably decreases their output while the resistance of the steel grid remains practically unchanged. In the second series of laboratory experiments, the following factors were determined: 1) the relative value of forces required for pushing through a coal blend through screen mesh and through slits and 2) friction coefficients between coal blend - steel and coal blend - coal blend (Tables 2 and 3, respectively). It was found that pushing through a slit requires more force than pushing through an opening and the value of the force required (for pushing coal blend through an opening (under other conditions constant) increases considerably faster than the increase in the depth of the opening (slit).

Cardl/2

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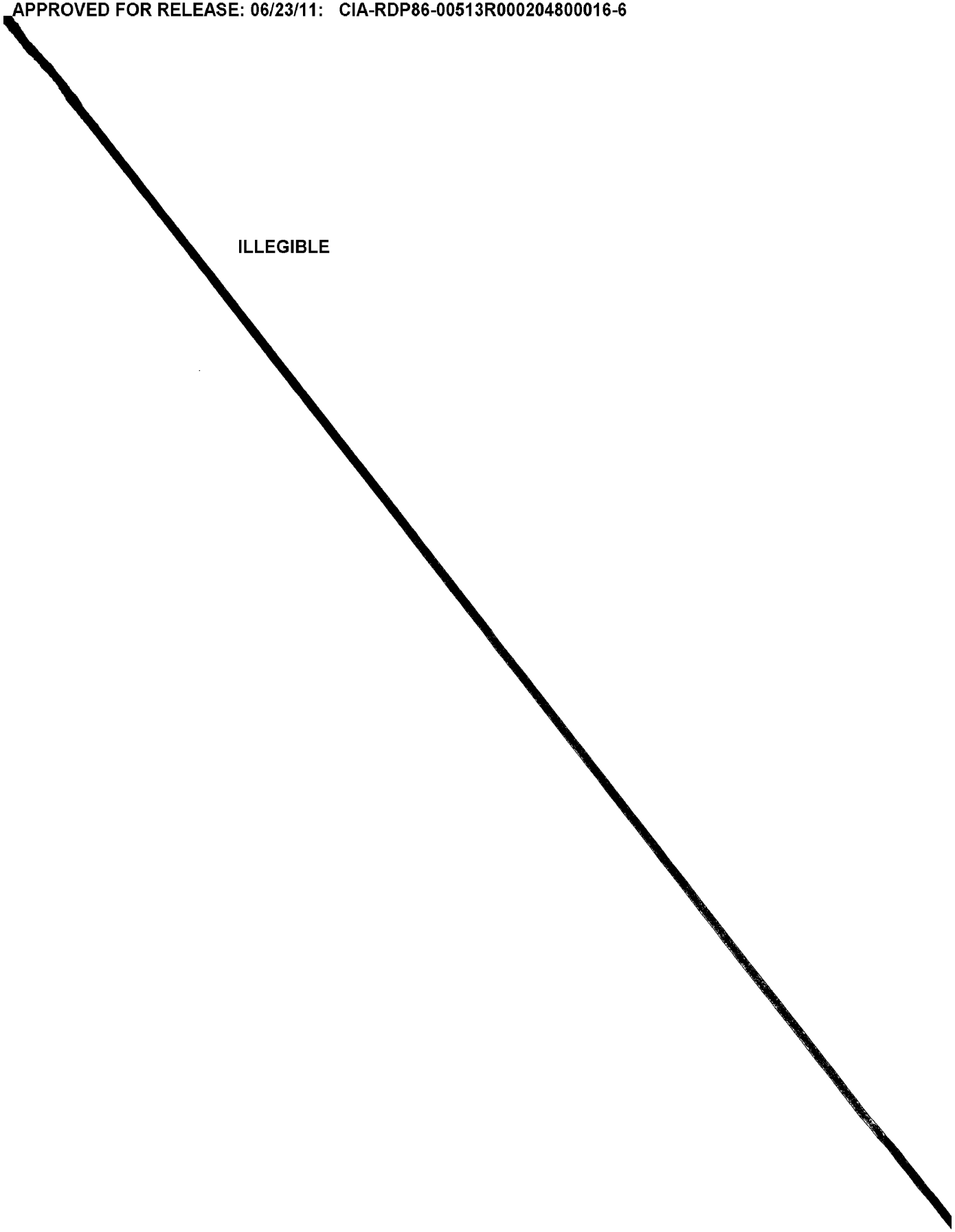

137-1958-1-44

The Relation Between Screen Size in a Hammer Mill (cont.)

where v is the radial velocity (m/sec) at each point of radius r (in meters); ω is the angular velocity (sec^{-1}); $\ell_d \geq v_{periph} \cdot d / v_{rad} + d$, where ℓ_d is the mesh size in the direction of motion of the hammer; and d is the particle size produced (in meters).

1. Hammer mills--Performance--Theory 2. Hammer mills--Performance--Mathematical analysis

V. R.

Ural'skiy politekhnicheskiy institut.

Card 2/2

BEREZIN, B. V.

137-1958-1-44

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 8 (USSR)

AUTHOR: Berezin, B. V.

TITLE: The Relation Between Screen Size in a Hammer Mill and Maximum Particle Size of Product (Zavisimost' mezhdu razmerami otverstiy reshetki molotkovoy drobilki i maksimal'nymi razmerami chastits produkta)

PERIODICAL: Gorn. zh., 1957, Nr 8, pp 30-33

ABSTRACT: Starting from the assumption that the depth of penetration of particles into the rotor of a hammer mill is decisive to the radial velocity they acquire at the instant of arrival at the periphery and on the size of the particles capable of leaving the mill through the screen mesh, the author advances a formula establishing the relationship between the depth of penetration of particles of various sizes toward the center of the rotor and the mesh size required to permit their escape from the mill

$$y_x = \omega \sqrt{r_x^2 + r_o^2}$$

Card 1/2

On the work of the screen in a hammer mill. (Cont.)

sectors of the screen work with different intensities; the lower the load, the lower the intensity of evacuation through each successive sector. At high loads the differences in the intensities of evacuation through successive sectors decrease. As the material moves along the screen the degree of fineness of the product increases. A decrease of the distance between hammers and the screen decreases the throughput of the latter and increases the fineness of the product and the proportion of dust in the product. As the wear of hammers increases the fineness of the product decreases and the proportion of dust increases. The wear of the screen has no practical influence on the fineness of the product but the proportion of dust formed is higher than with worn hammers. There are 4 figures, 3 tables and 6 Slavic references.

ASSOCIATION: Makeyevsk Coke Oven Works (Makeevskiy koksokhimicheskiy zavod).

AVAILABLE:

Card 2/2

AUTHOR: Berezin, B.V.

68-5-12/14

TITLE: On the work of the screen in a hammer mill. (O rabote reshetki molotkovoy drobilki).

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry), 1957, No.5, pp.51-55 (U.S.S.R.)

ABSTRACT: The work of the screen in a hammer mill was investigated in the No.2 coal preparation plant on the Makeyevsk works. Relative intensity of throughput through various zones of the screen as well as the influence of the distance between the screen and hammers and the wear of the hammers and the screen on the fineness of grinding and size distribution of the product were tested. Experiments were carried out on reversible hammer mills grinding wet coals. The mills operated at 735 rpm which corresponds to the peripheral speed of 55.8 m/sec. The majority of samples were taken from under various parts of the screen. Several samples were usually taken simultaneously. The sampling vessel used and its positioning in the mill are shown in Figs.1 and 2 respectively. It was found that the evacuation of the product through various sectors of the screen is non-uniform. The main part of the product (85-90%) leaves the mill through openings over which the hammers pass. Successively placed

Card 1/2

Berezin, B. V.

68-10-13/22

AUTHOR: Berezin, B.V.

TITLE: An Application of Acid Resistant Concrete in Chemical Apparatus (O primenenii kislotoupornogo betona v khimicheskoy apparature)

PERIODICAL: Koks i Khimiya, 1957, Nr 10, pp.51-53 (USSR)

ABSTRACT: On the basis of experience the use of acid resistant concrete for lining parts of an ammonium sulphate plant (Figs.1-3) is recommended. There are 3 figures.

ASSOCIATION: Makeyevka Coke Oven Works (Makeyevskiy Koksokhimicheskiy Zavod)

AVAILABLE: Library of Congress.

Card 1/1

BEREZIN, B. V. Cand Tech Sci -- (diss) "Study of the operation of hammer crushers." Sverdlovsk, 1957. 12 pp (Min of Higher Education USSR. Ural Polytechnic Inst im S. M. Kirov), 100 copies (KL, 42-57, 93)

BEREZIN, B. V. (Eng.), MAMON, F. D. (Eng.)

BEREZIN, B. V. (Eng.), MAMON, F. D. (Eng.)

Dumping Appliances

Unloading coal from cars by means of a rotary car dumper. Mekh. trud. rab. 6 no. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. UNCLASSIFIED.

BEREZIN, B.P., inzh.

Mechanization of labor-consuming repair work. Mekh. i avtom. proizv. 19 no.9:9-10 S '65. (MIRA 18:9)

BEREZIN, Boris Pavlovich; SMIRNOV, Ye.I., red.; PONOMAREVA, A.A., tekhn. red.

[Productive capacity of repair enterprises] Proizvodstvennaia moshchnost' remontnogo predpriiatiia. Moskva, Ekonomizdat, 1963. 168 p. (MIRA 16:6)
(Machinery--Maintenance and repair)

BEREZIN, Boris Prokop'yevich, kand.tekhn.nauk; SHYGEL', Iosif Afroimovich, kand.tekhn.nauk; KARAKULEV, A.V., kand.tekhn.nauk, nauchnyy red.; VASIL'YEV, A.V., red.izd-va; GURDZHIYEVA, A.M., tekhn.red.

[Machine-tool construction in the U.S.S.R.] Stankostroenie v SSSR. Leningrad, Ob-vo po rasprostraneniiu polit. i nauchn.znanii RSFSR, Leningr.otd-nie, 1960. 43 p. (MIRA 14:4)
(Machine tool industry)

BEREZIN, Boris Pavlovich; KOLTUNOVA, M.P., red.; BOBROVA, Ye.N., tekhn.red.

[Economics and organization of repair shops for track maintenance and construction equipment] Ekonomika i organizatsiia remontnykh predpriiatii putevogo khoziaistva i stroitel'stva. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 241 p. (MIRA 13:11)

(Railroads--Repair shops)

GOL'DENBERG, I.L., inzh.; ISAKOVSKIY, I.G., ekonomist; BEREZIN, B.P., inzh.; STOTIK, V.S., inzh.; VOROB'YEVA, L.V., tekhn.red.

[Economic efficiency of capital investments and new machinery in transportation construction] Ekonomicheskaia effektivnost' kapital'nykh vlozhenii i novoi tekhniki v transprothom stroitel'stve. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1962. 233 p. (Bubushkin. Vsesoiuznyi nauchno-issledovatel'skii institut transportnogo stroitel'stva. Trudy, no.48). (MIRA 16:2)

(Transportation--Buildings and structures)

Manufacturing Processes of the More (Cont.) SOV/3281

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25(1, 7) PHASE I BOOK EXPLOITATION SOV/3281

Berezin, Boris Prokop'yevich, Aron Abramovich Mosyak, Vikentiy Markianovich Nikiforov, Georgiy Ivanovich Pogodin-Alekseyev, Nikolay Dmitriyevich Titov, Boris Gavrilovich Shpital'nyy, and Nikolay Aksent'yevich Shcherbina

Tekhnologiya vazhneyshikh otrasley promyshlennosti, chast' 2: Mashinostroyeniye; uchebnoye posobiye dlya vysshikh partiynykh shkol (Manufacturing Processes of the More Important Branches of Industry, Part 2: Machinery Manufacture; Manual for Higher Party Schools) Moscow, Izd-vo VPSh i AON pri TsK KPSS, 1959. 376 p. 15,600 copies printed.

Sponsoring Agency: Kommunisticheskaya partiya Sovetskogo Soyuza. Vysshaya partiynaya shkola. Kafedra promyshlennogo proizvodstva i stroitel'stva.

Eds.: G.I. Pogodin-Alekseyev, A.G. Kokoshko, and D.R. Beyzel'man; Tech. Ed.: K. M. Naumov.

PURPOSE: This textbook is intended for students of higher party schools.

COVERAGE: The book deals with manufacturing processes in the machine industry. Rolling, drawing, pressing, forging, and stamping of metals are discussed in Part I, founding in Part II, welding and gas cutting in Part III, and metal cutting in Part IV. No personalities are mentioned. There are no references.

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